

**From:** Berndt,Cindy  
**Sent:** Wednesday, January 30, 2008 8:19 PM  
**To:** blakeearly@aol.com  
**Cc:** Darton,Terry  
**Subject:** FW:

Mr. Early. I'm forwarding your testimony to Terry Darton for inclusion in the public comment file.

-----Original Message-----

**From:** blakeearly@aol.com [mailto:blakeearly@aol.com]  
**Sent:** Wed 1/30/2008 3:36 PM  
**To:** Berndt,Cindy  
**Cc:** richard@langfordmail.net; b\_buckheit@msn.com; jhanson@bdlaw.com; hullie@comcast.com; vthomson@virginia.edu  
**Subject:**

Dear Ms Berndt,

Unfortunately, I was unable to stay at the long but informative public hearing on January 25 regarding the Mirant operational permit to present my views at my allotted time. Please include the attached testimony in the public record.

Thank you for your assistance.

Blakeman Early

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**Testimony of A. Blakeman Early  
Before the Virginia Department of  
Environmental Quality**

**Regarding the Two Stack Merge Permit  
for Mirant PRGS**

**January 25, 2008**

My name is A. Blakeman Early. I live at 600 Second Street in Alexandria which is about three blocks from the Mirant power plant. I have spent over twenty years working on air quality legislative and regulatory activities primarily involving the Clean Air Act. For the last twelve years I have been working as an environmental consultant on air quality issues for the American Lung Association, but I appear today on my own behalf. My views expressed today are my own.

**Public Health Protection Requires Obtaining Emissions Reduction Well Below the Legal Maximum**

The focus of this permitting effort appears to be on obtaining sufficient emissions reduction to avoid violating National Ambient Air Quality Standards (NAAQS). I urge a greater focus on obtaining the necessary reductions to truly protect the public health of Alexandria's residents. Why is this important? Because, particularly in the case of fine particles, or PM<sub>2.5</sub>, the NAAQS standards are not set at a level to fully protect public health. EPA's revised standards for PM 2.5 were set at a level higher than that recommended by its own panel of science advisors and its own expert staff. They are under legal challenge from the American Lung Association and others because adverse health effects have been demonstrated in cities across the country where the daily concentration of fine particles are well below the EPA standard.<sup>1</sup> Achieving lower

emissions than the bare minimum for Mirant and thus lowering concentrations of fine particles will translate into lower risk of asthma attacks, emergency room visits and hospitalizations and early death from heart attack and stroke.

Getting the Mirant permit right is paramount because it is the largest single source of fine particle in Alexandria. Most other particle pollution in the area is coming from mobile sources including trucks, buses and other vehicles coming across Wilson Bridge and airplanes at National Airport. Efforts to obtain fine particle reductions from these sources may ultimately be needed, but the effort will be far more difficult and expensive. Mirant's location adjacent to a densely populated neighborhood which includes a bike path literally yards from Mirant's doors only enhances the need to be sure needed fine particle emissions reductions are achieved.

I urge that the permit not allow PM<sub>10</sub>, commonly called coarse particle pollution to be used as a surrogate for PM<sub>2.5</sub> fine particle requirements. While this is allowed by EPA guidance, I believe that's only because the practice has not been subject to a full public review. The only way to be sure you are getting the necessary fine particle reduction is to set requirements based on PM<sub>2.5</sub> measurements. Further, I recommend that any credit allowed for dispersion modeling be allowed only after inclusion of an appropriate safety factor to account for potential mistakes in the modeling. This is, again, made more important due to Mirant's location. Finally, it is clear the best way to ensure the fine particle reductions necessary to protect public health is for the permit to require the use of a baghouse for particulate air pollution control.

### **We Need to Protect Alexandria's Children, Elderly, and Lung and Heart Impaired**

Research shows that those most vulnerable to air pollution include children, particularly children with asthma, the elderly, adults with lung impairment or disease, and people with cardiovascular impairment or disease. According the American Lung Association's "State of the Air:2007" report, Alexandria has an estimated 26,000 children, 2,300 of them with asthma, 14,000 elderly, 15,000 adults with lung disease and 30,000 adults with cardiovascular disease.<sup>ii</sup> The vulnerable populations experience greater adverse health effects at lower levels of air pollution than healthy adults or children do. We have an obligation to provide air quality that is safe for them.

### **Monitor for Short Term SO<sub>2</sub> "Spikes"**

Research shows that exercising mild and moderate asthmatic children, adolescents and adults are at higher risk of adverse health effect from short term peaks of SO<sub>2</sub> last from 5- 10 minutes<sup>iii</sup>. These responses narrowing of the airway, and increased airway resistance and include wheezing, chest tightness, and shortness of breath typically associated with asthma attacks.

EPA has refused to set a short term SO<sub>2</sub> NAAQS due to the dearth of monitoring data that would provide needed frequency and exposure information to set the standard.

Given Mirant's proximity to a well used bike path and nearby African American neighborhoods where childhood rates are often greatly elevated, I urge you to arrange for short term monitoring to determine if SO<sub>2</sub> peaks pose a risk.

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- <sup>i</sup> Dominici F, Peng RD, Bell ML, McDermott A, Zeger SL, Samet JM. "Fine Particulate Air Pollution and Hospital Admission for Cardiovascular and Respiratory Disease," *JAMA* 2006,; 10:1127-1134.
- <sup>ii</sup> American Lung Association, State of the Air:2007"; 188, available at "www.lungusa.org"
- <sup>iii</sup> Horstman DH, Roger LJ, Kehrl HR, Hazucha MJ.; "Airway Sensitivity of Asthmatics to Sulfur Dioxide," *Toxicol. Ind. Health*, 1986; 2:2899-298.